

CLAIMS:

EI SUB CT 1. An insertable medical device having a protective surface coating, said coating comprising a polymer selected from the group consisting of thermoplastic polymers and 5 thermosetting polymers and said coating being noncontinuous on said medical device.

2. The medical device of Claim 1 wherein said device is a dilatation balloon.

3. A dilatation balloon having improved durability formed from a thermoplastic polymer, said balloon having a non-continuous protective coating.

4. The dilatation balloon of Claim 3 wherein said balloon is formed from a polymer 10 selected from the group consisting of polyethylene terephthalate, high density polyethylene, polyamides, polyether block amides, polycarbonates, stiff polyurethanes, and mixtures thereof.

5. The dilatation balloon of Claim 3 wherein said coating comprises a polymeric material selected from the group consisting of thermoplastic polymeric and thermosetting 15 polymeric materials.

6. The dilatation balloon of Claim 3 wherein said coating comprises a polyurethane.

7. The dilatation balloon of Claim 3 wherein said noncontinuous coating is selected from the group consisting of a waffle pattern, a stripe pattern and a pattern having circular perforations.

20 8. The dilatation balloon of Claim 3 wherein said balloon is formed from a noncompliant material.

9. A method of providing a dilatation balloon with improved durability comprising the steps of:

25 a) forming a balloon wherein said balloon has a body, at least one cone portion, and at least one waist portion; and

c) applying a noncontinuous protective coating to said balloon.

10. The method of Claim 9 wherein said balloon is formed by first extruding a tubular preform and blowing said preform into a balloon.

11. The method of Claim 9 wherein said noncontinuous coating is applied in a 30 pattern.

12. The method of Claim 9 wherein said pattern is selected from the group consisting

of a waffle pattern, a stripe pattern and a pattern having circular perforations.

13. The method of Claim 9 wherein said coating is applied by a pad printing method.

14. The method of Claim 9 wherein said coating is applied to said balloon body.

15. The method of Claim 9 wherein said balloon is formed from a non-compliant
5 thermoplastic polymer.

16. The method of Claim 9 wherein said balloon is formed from a thermoplastic polymer selected from the group consisting of polyethylene terephthalate, high density polyethylene, polyamides, polyether block amides, polycarbonates and stiff polyurethanes, and mixtures thereof.

10 17. The method of Claim 16 wherein said balloon is formed from a thermoplastic polymer selected from the group consisting of polyether block amides and polyethylene terephthalate.

18. The method of Claim 9 wherein said coating is applied to said balloon as a solution of the polymer in a solvent.

15 19. The method of Claim 9 wherein said coating comprises a polymeric material selected from thermoplastic polymeric materials and thermosetting polymeric materials.

20. The method of Claim 10 wherein said coating comprises a polyurethane.

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Add C³7

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